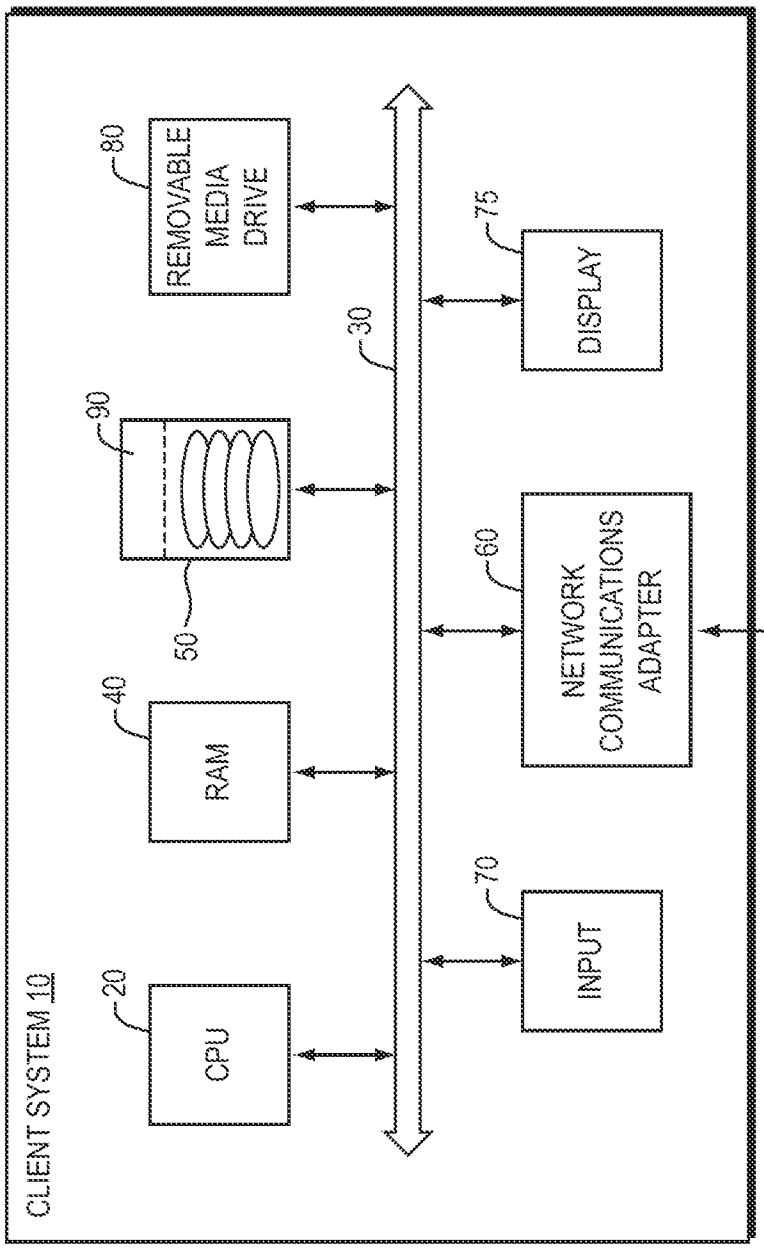
CLIENT SYSTEM 10
CPU
20
RAM
40
50
90
REMOVABLE MEDIA DRIVE
80
30
DISPLAY
75
NETWORK COMMUNICATIONS ADAPTER
60
INPUT
70
TO/FROM 160 FIG. 2

FIG. 1

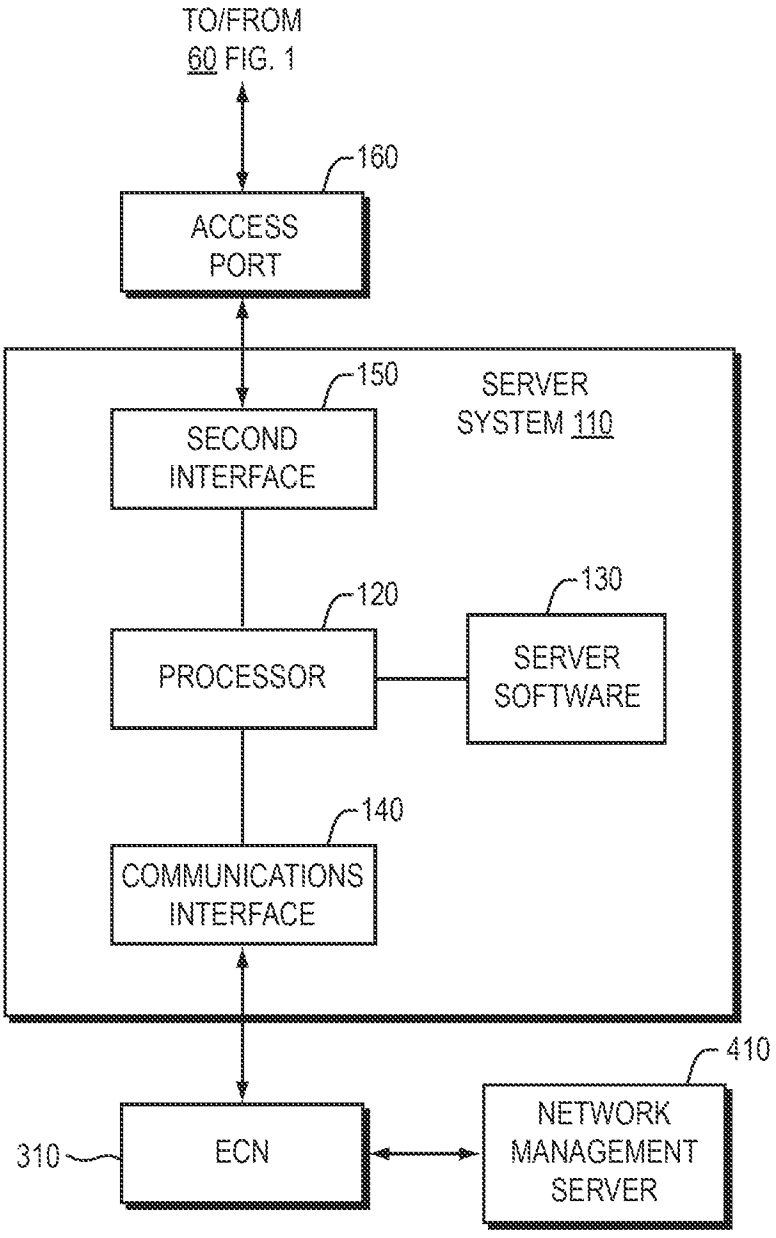
TO/FROM
60 FIG. 1
160
ACCESS
PORT
150
SECOND
INTERFACE
SERVER
SYSTEM 110
120
PROCESSOR
130
SERVER
SOFTWARE
140
COMMUNICATIONS
INTERFACE
410
NETWORK
MANAGEMENT
SERVER
310
ECN

FIG. 2

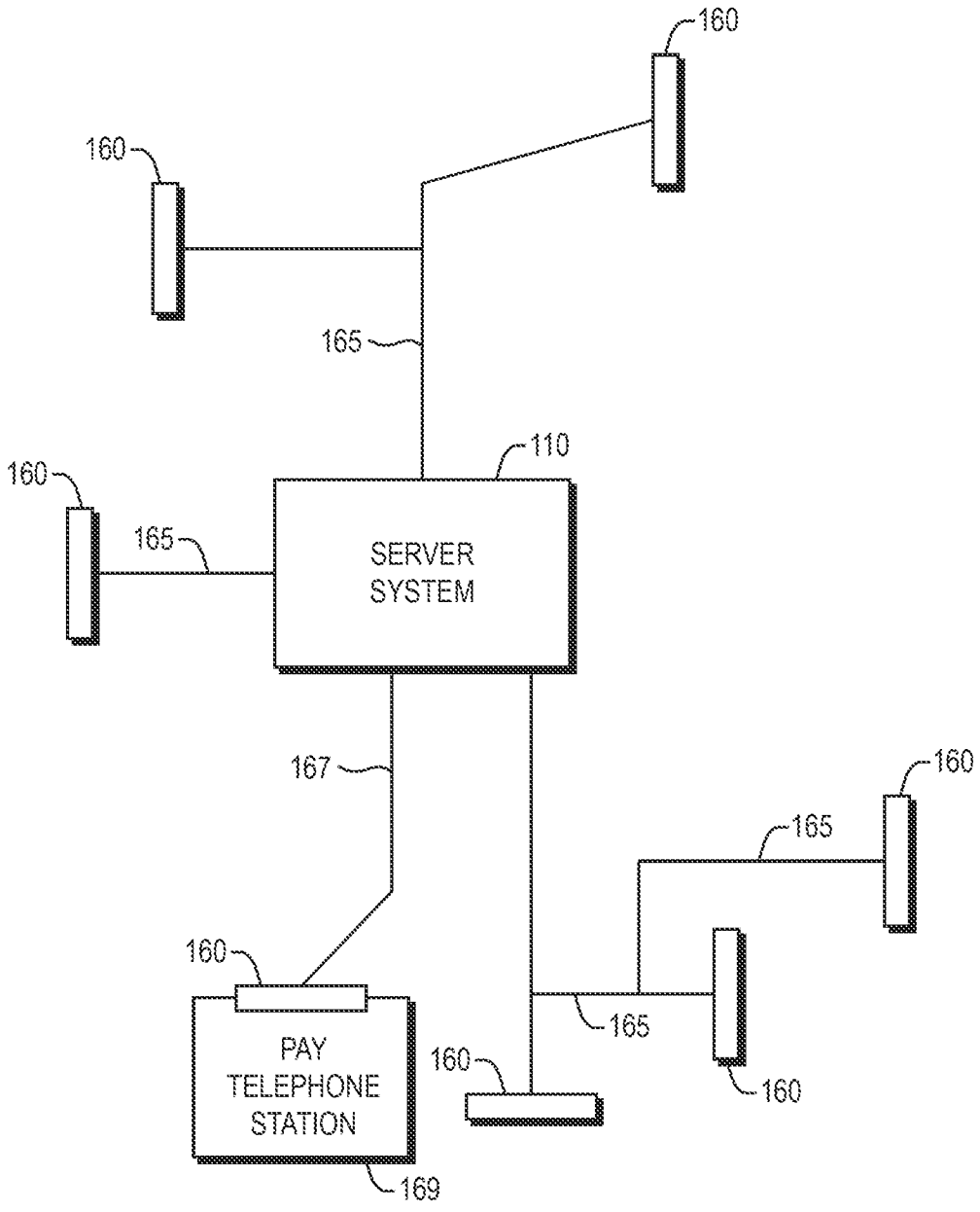
160
160
165
110
160
165
SERVER
SYSTEM
167
160
165
160
PAY
TELEPHONE
STATION
165
160
160
169

FIG. 3A

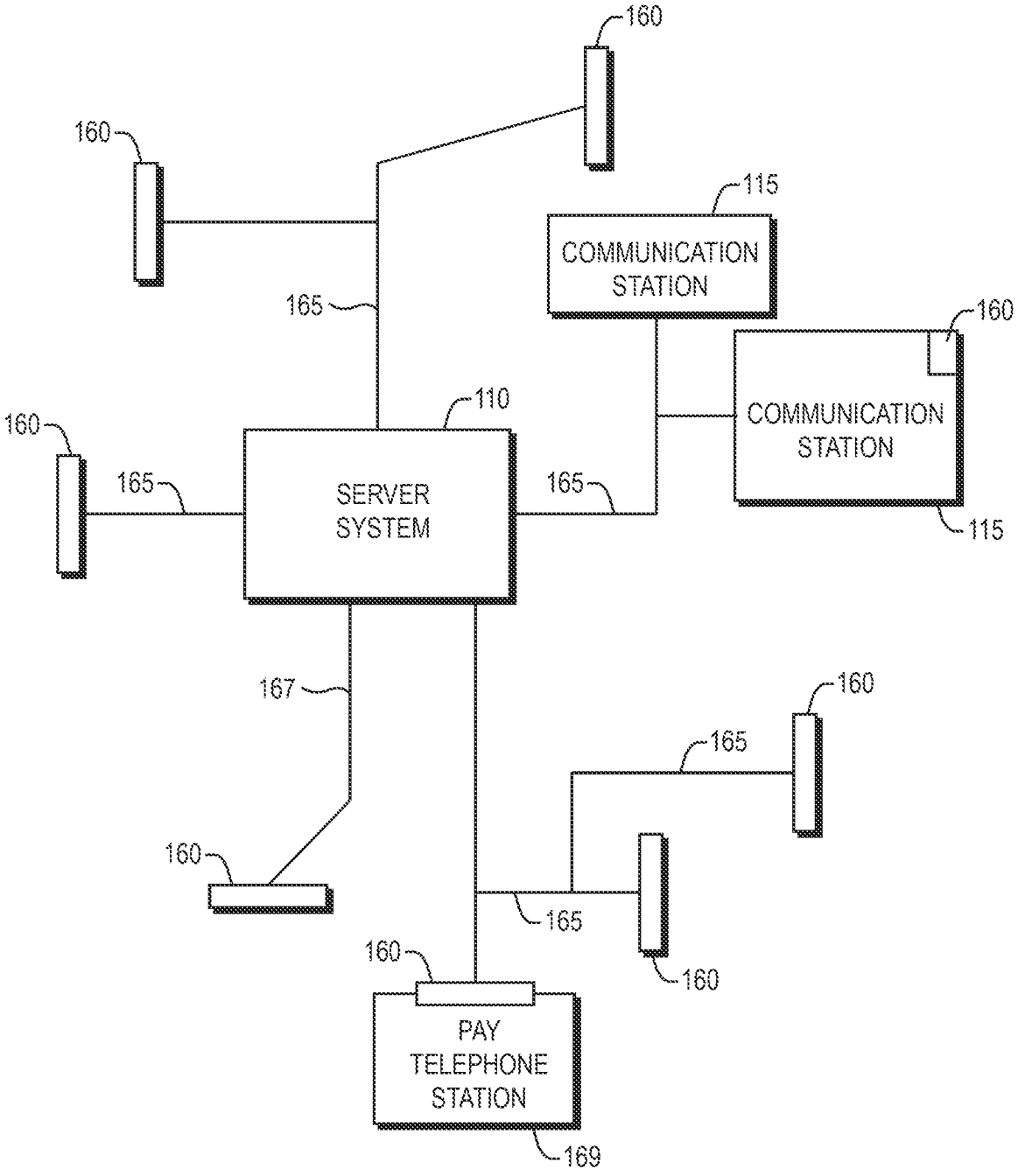
160
160
115
COMMUNICATION STATION
165
160
110
160
165
SERVER SYSTEM
165
COMMUNICATION STATION
115
167
160
165
160
165
160
160
PAY TELEPHONE STATION
169

FIG. 3B

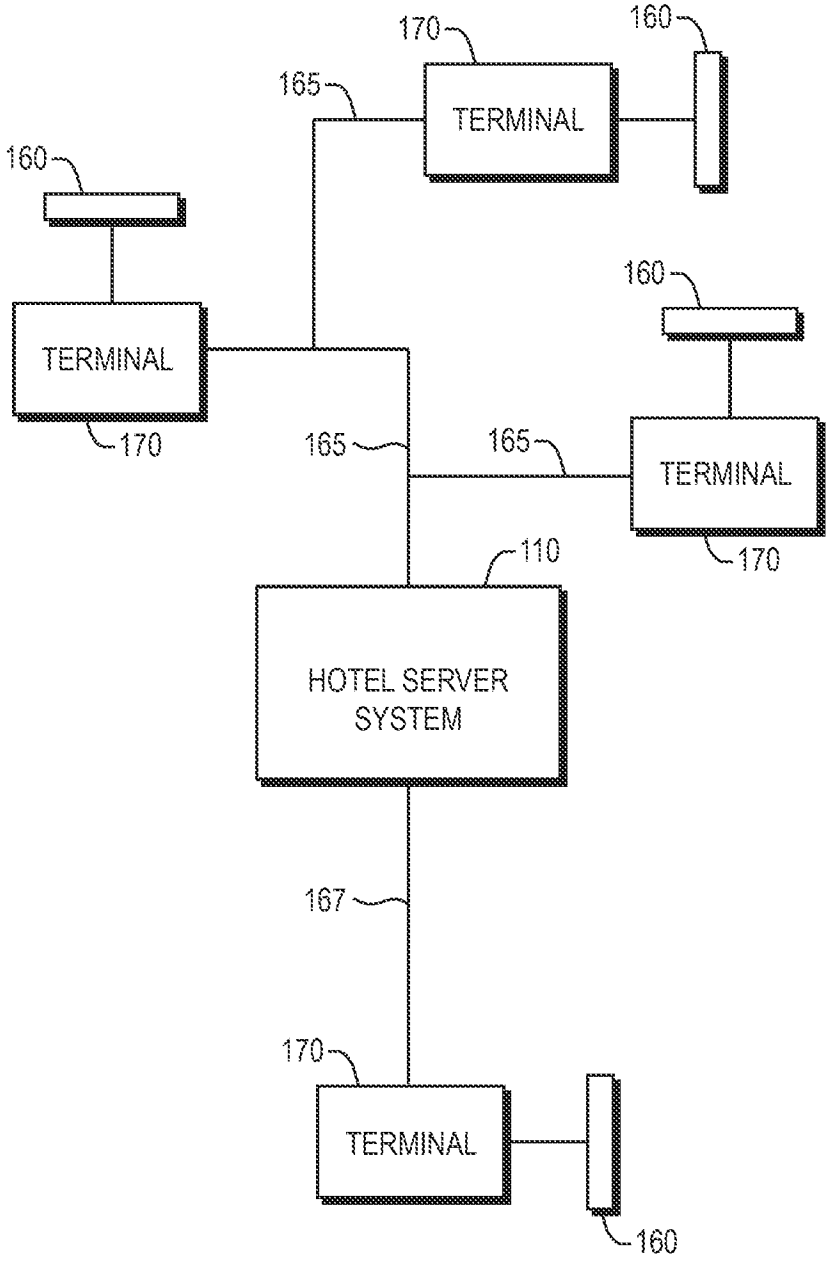
170
160
165
TERMINAL
160
TERMINAL
160
TERMINAL
170
165
165
TERMINAL
170
110
HOTEL SERVER SYSTEM
167
170
TERMINAL
160

FIG. 4A

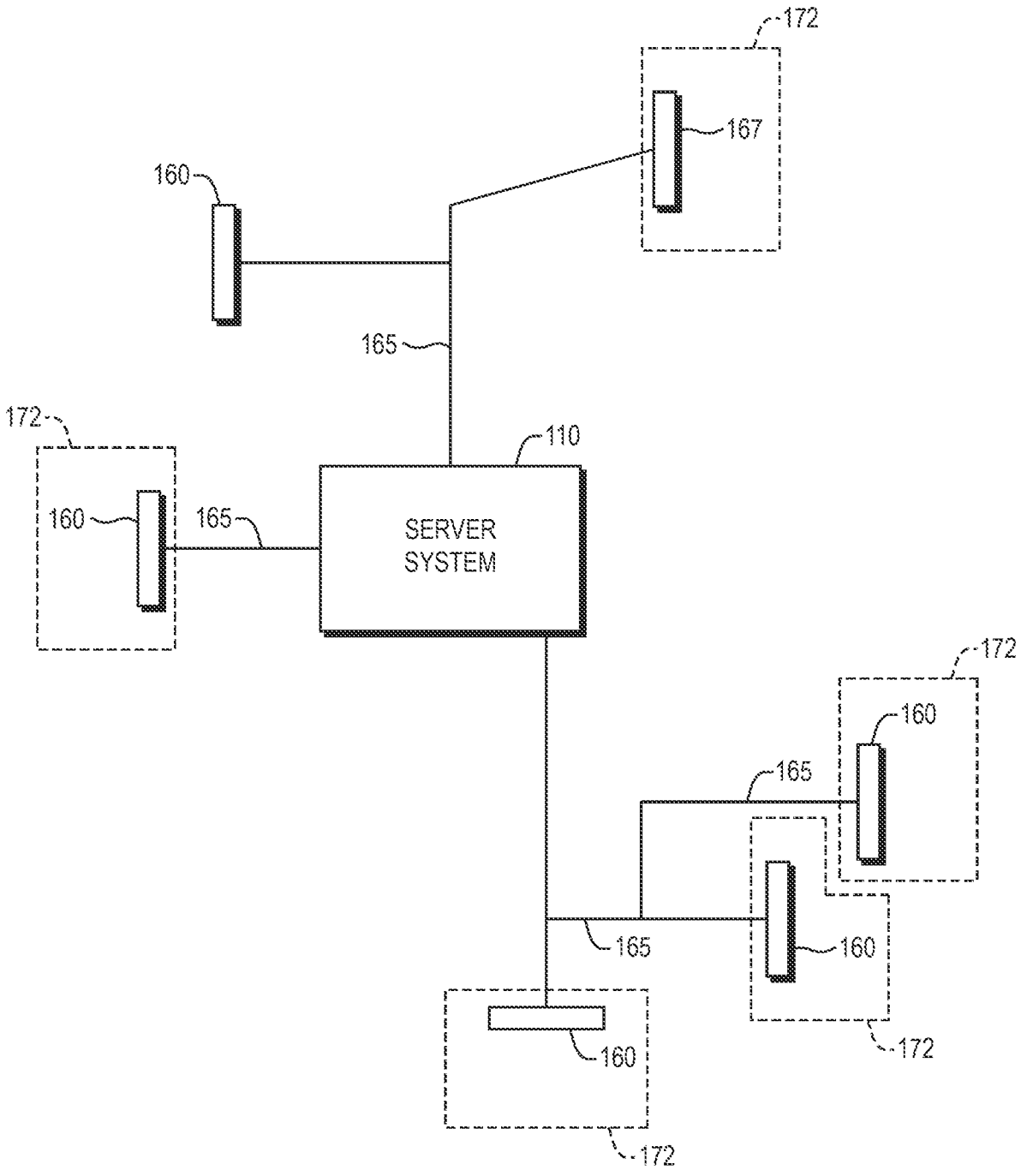
172
167
160
165
172
110
160
165
SERVER
SYSTEM
172
160
165
160
165
160
172
172

FIG. 4B

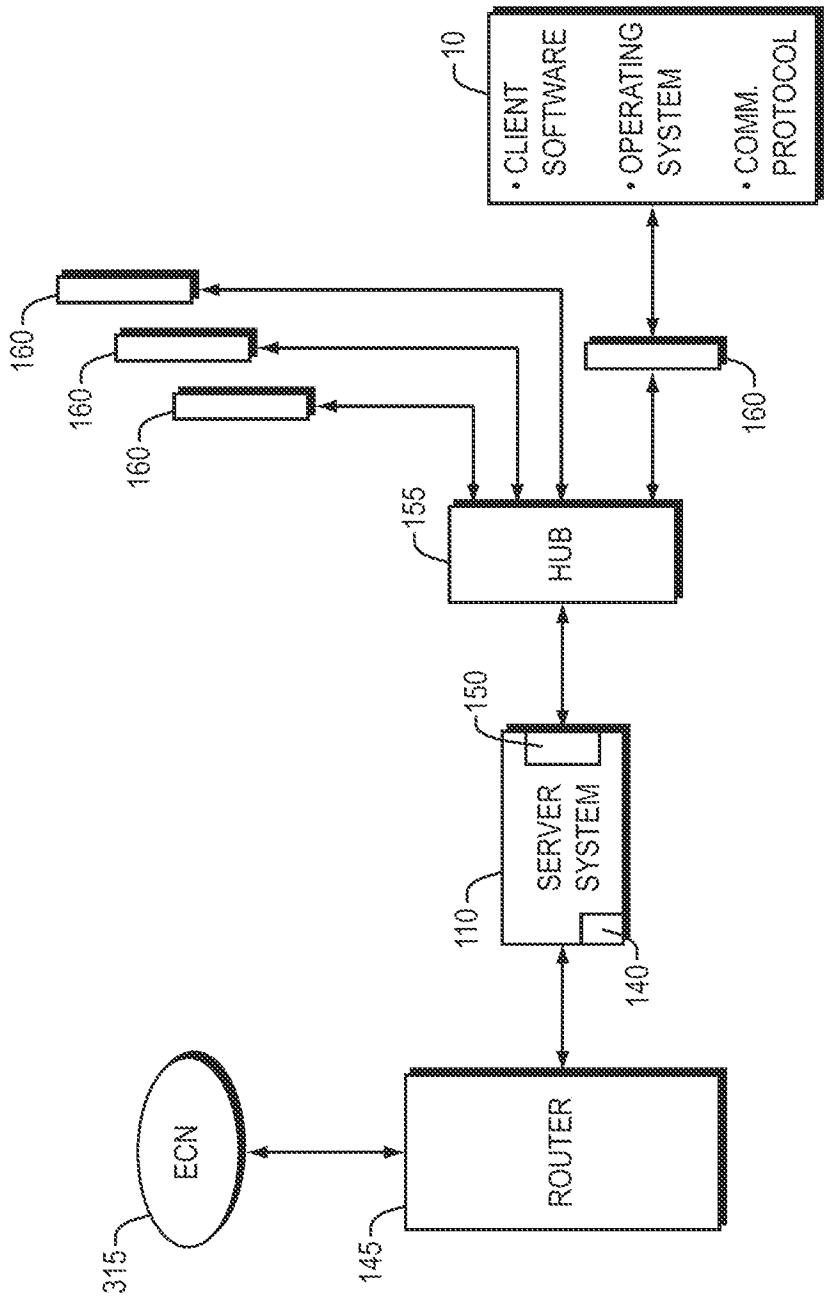
10
• CLIENT SOFTWARE
• OPERATING SYSTEM
• COMM. PROTOCOL
160
160
160
160
155
HUB
150
SERVER SYSTEM
110
140
ROUTER
145
ECN
315

FIG. 5

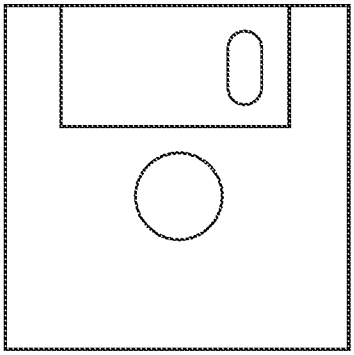

FIG. 6A

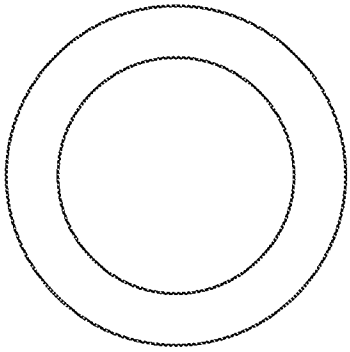

FIG. 6B

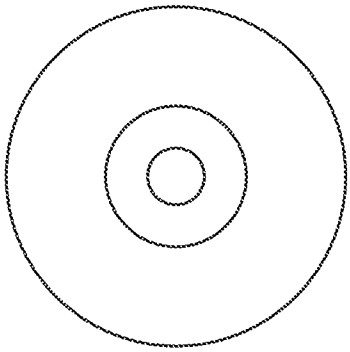

FIG. 6C

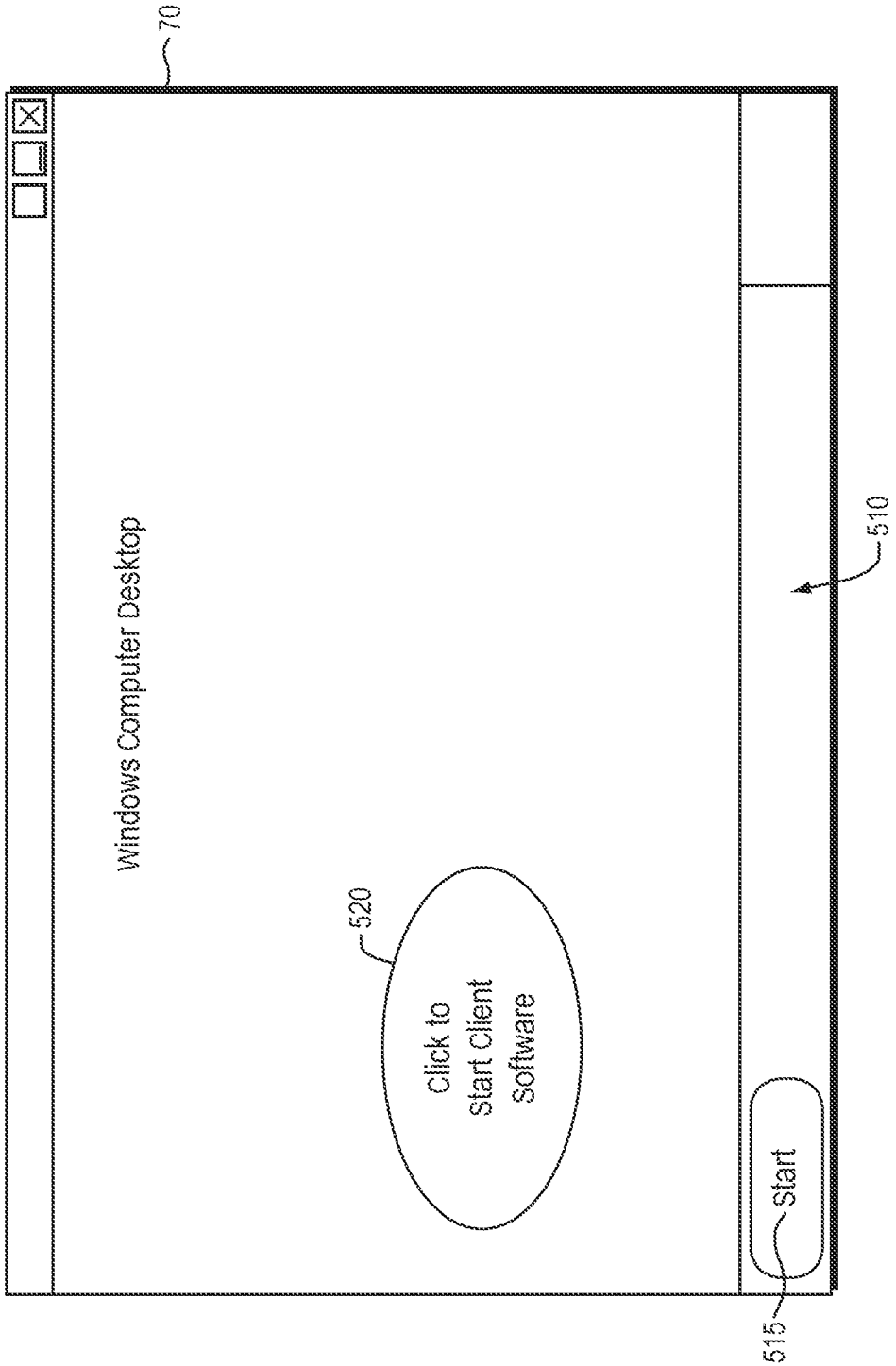
70
Windows Computer Desktop
520
Click to
Start Client
Software
510
Start
515

FIG. 7

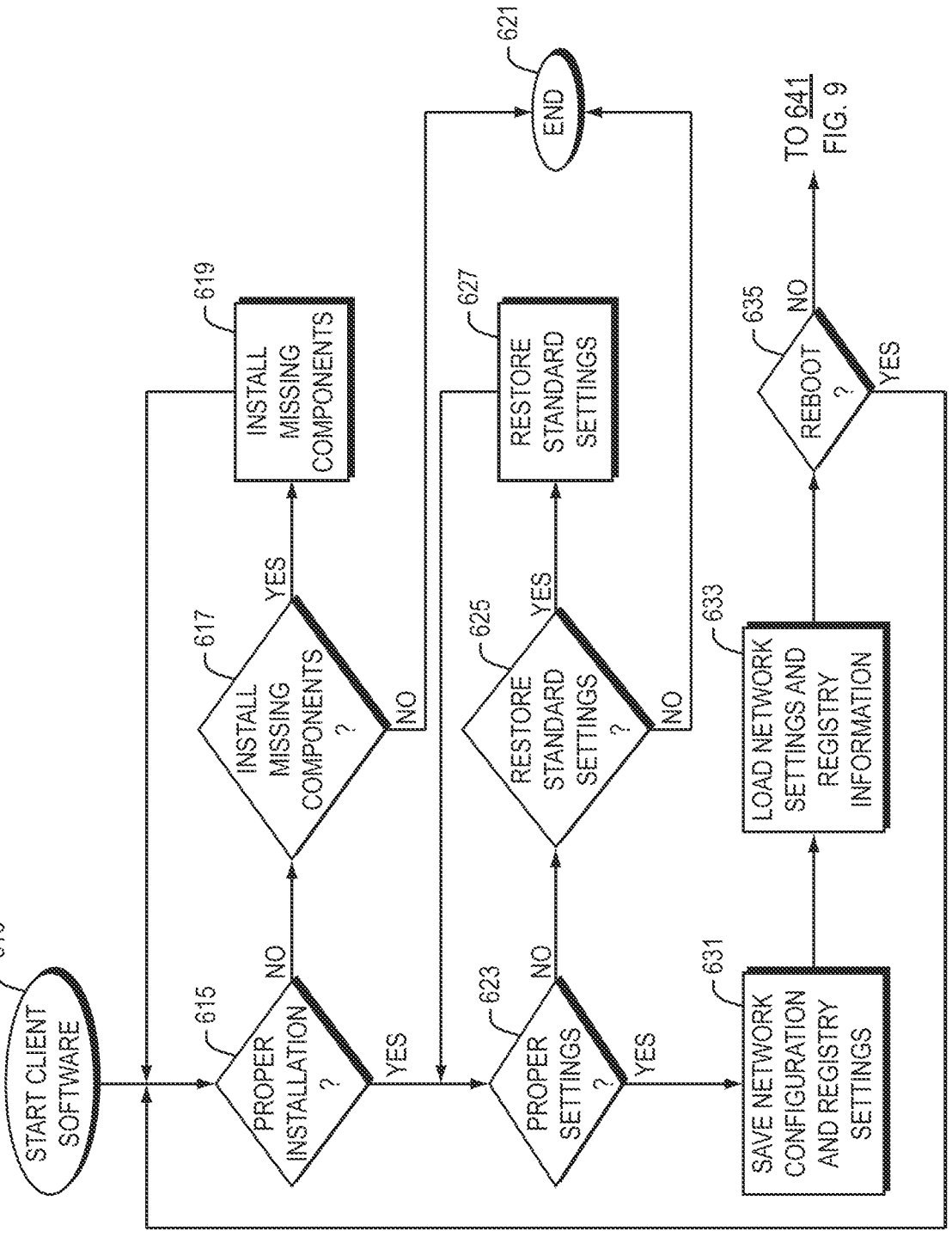
610
START CLIENT SOFTWARE
615
PROPER INSTALLATION ?
NO
YES
617
INSTALL MISSING COMPONENTS ?
YES
NO
619
INSTALL MISSING COMPONENTS
623
PROPER SETTINGS ?
NO
YES
625
RESTORE STANDARD SETTINGS ?
YES
NO
627
RESTORE STANDARD SETTINGS
631
SAVE NETWORK CONFIGURATION AND REGISTRY SETTINGS
633
LOAD NETWORK SETTINGS AND REGISTRY INFORMATION
635
REBOOT ?
NO
YES
621
END
TO 641
FIG. 9

FIG. 8

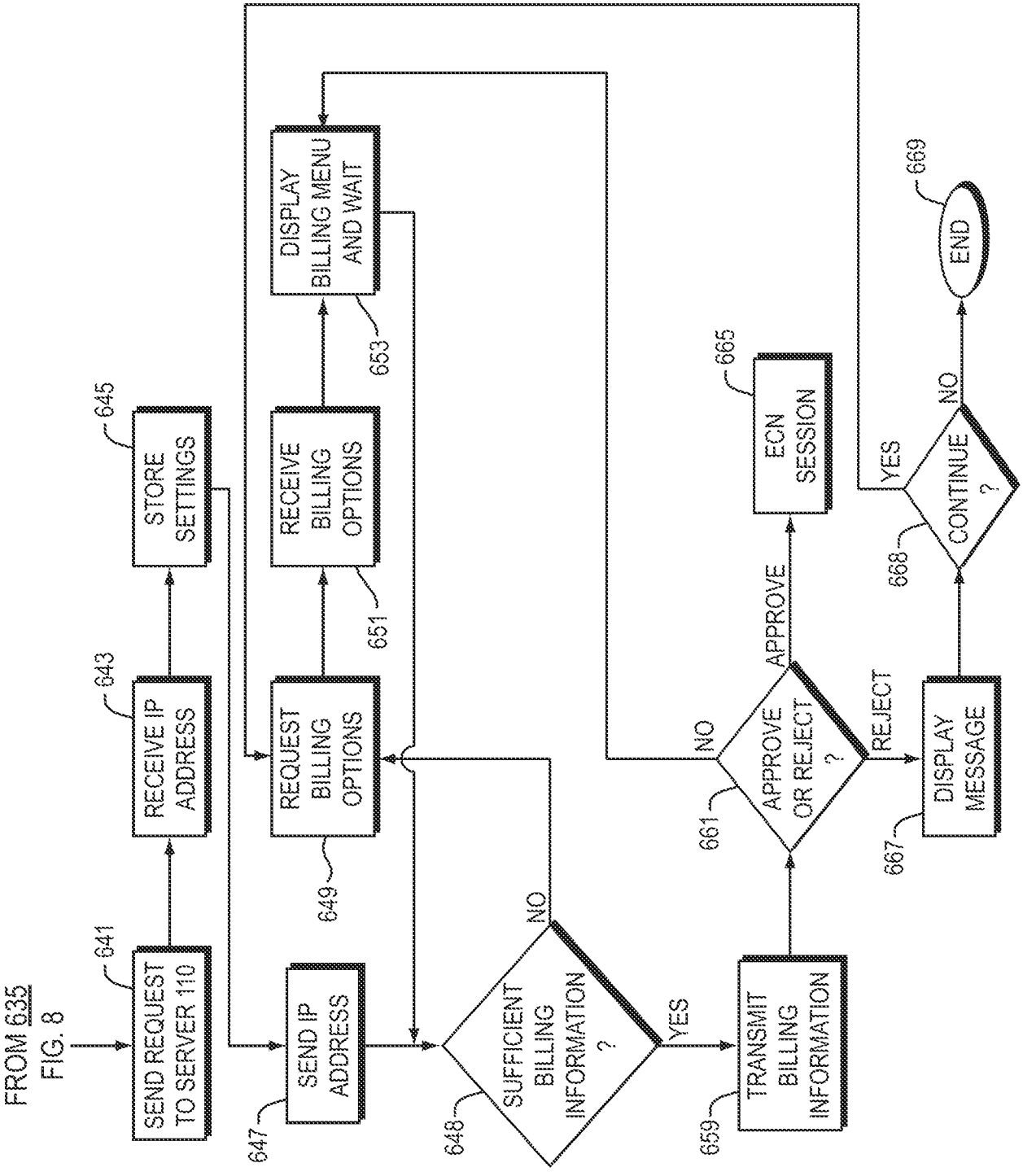
FROM 635
FIG. 8
641
SEND REQUEST TO SERVER 110
643
RECEIVE IP ADDRESS
645
STORE SETTINGS
647
SEND IP ADDRESS
649
REQUEST BILLING OPTIONS
651
RECEIVE BILLING OPTIONS
653
DISPLAY BILLING MENU AND WAIT
648
SUFFICIENT BILLING INFORMATION ?
NO
YES
659
TRANSMIT BILLING INFORMATION
661
APPROVE OR REJECT ?
NO
APPROVE
REJECT
665
ECN SESSION
667
DISPLAY MESSAGE
668
CONTINUE ?
YES
NO
669
END

FIG. 9

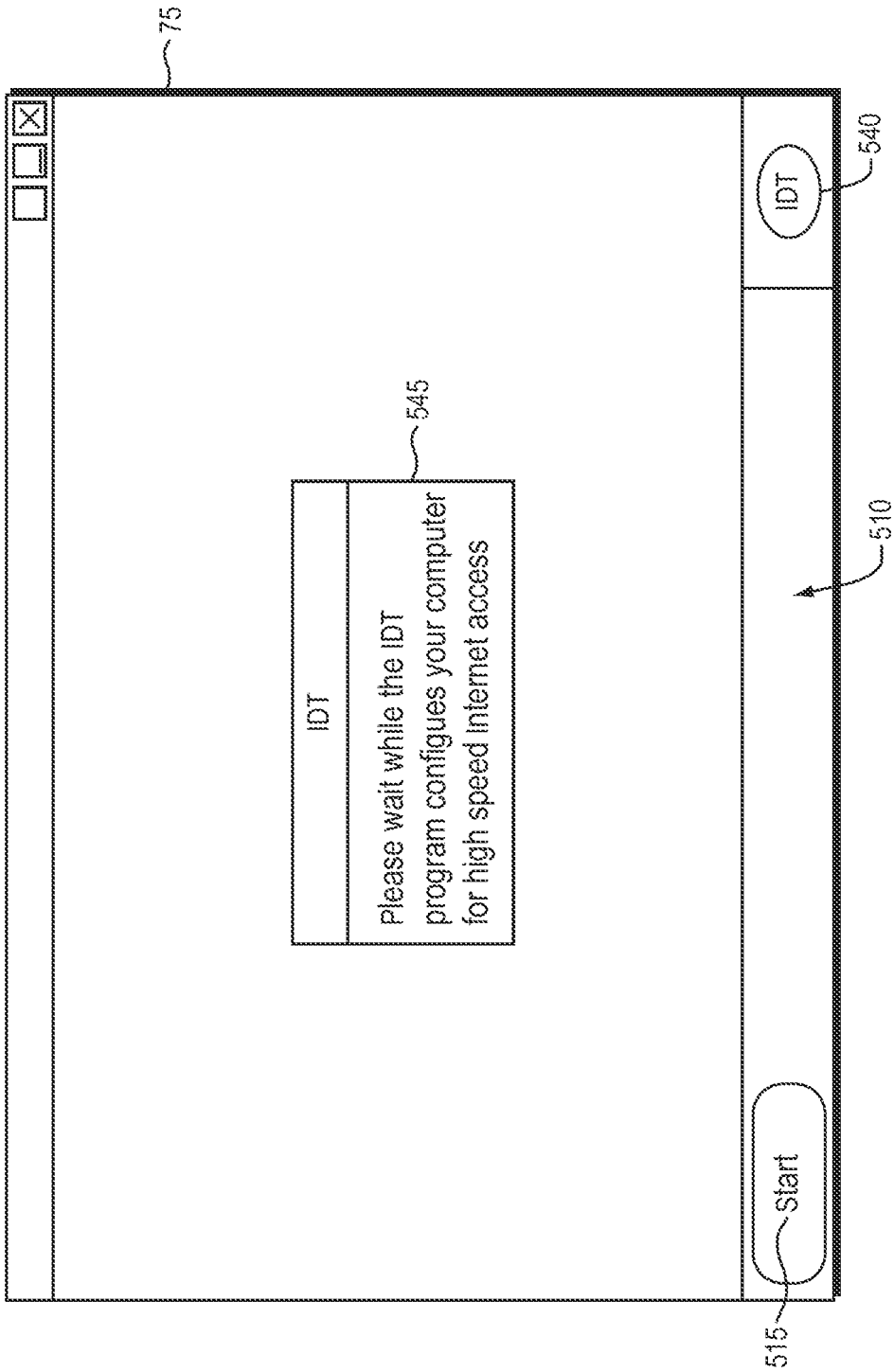
75
IDT
540
545
IDT
Please wait while the IDT program configues your computer for high speed internet access
510
Start
515

FIG. 10

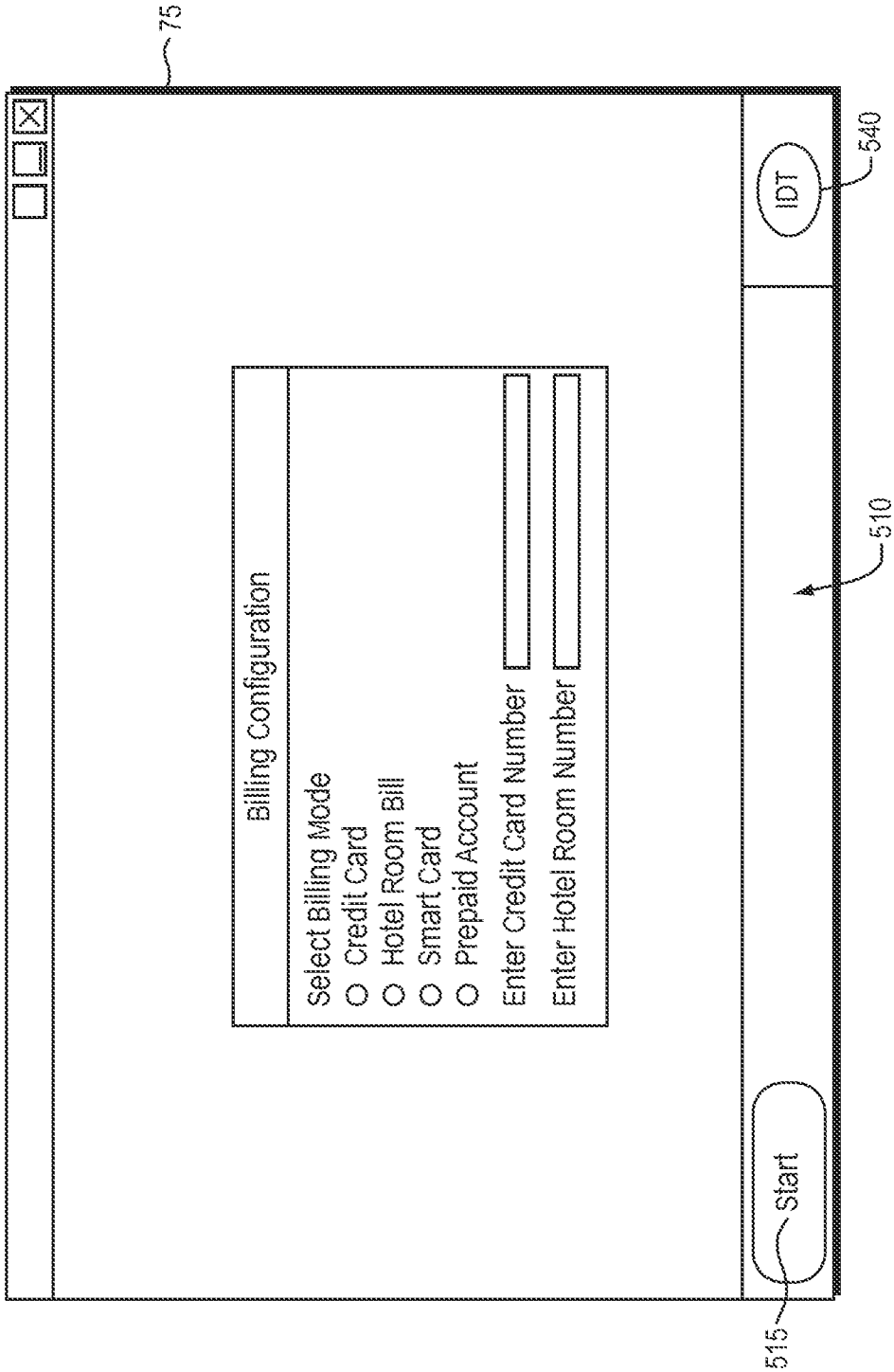
75
Billing Configuration
Select Billing Mode
Credit Card
Hotel Room Bill
Smart Card
Prepaid Account
Enter Credit Card Number
Enter Hotel Room Number
IDT
540
510
Start
515

FIG. 11

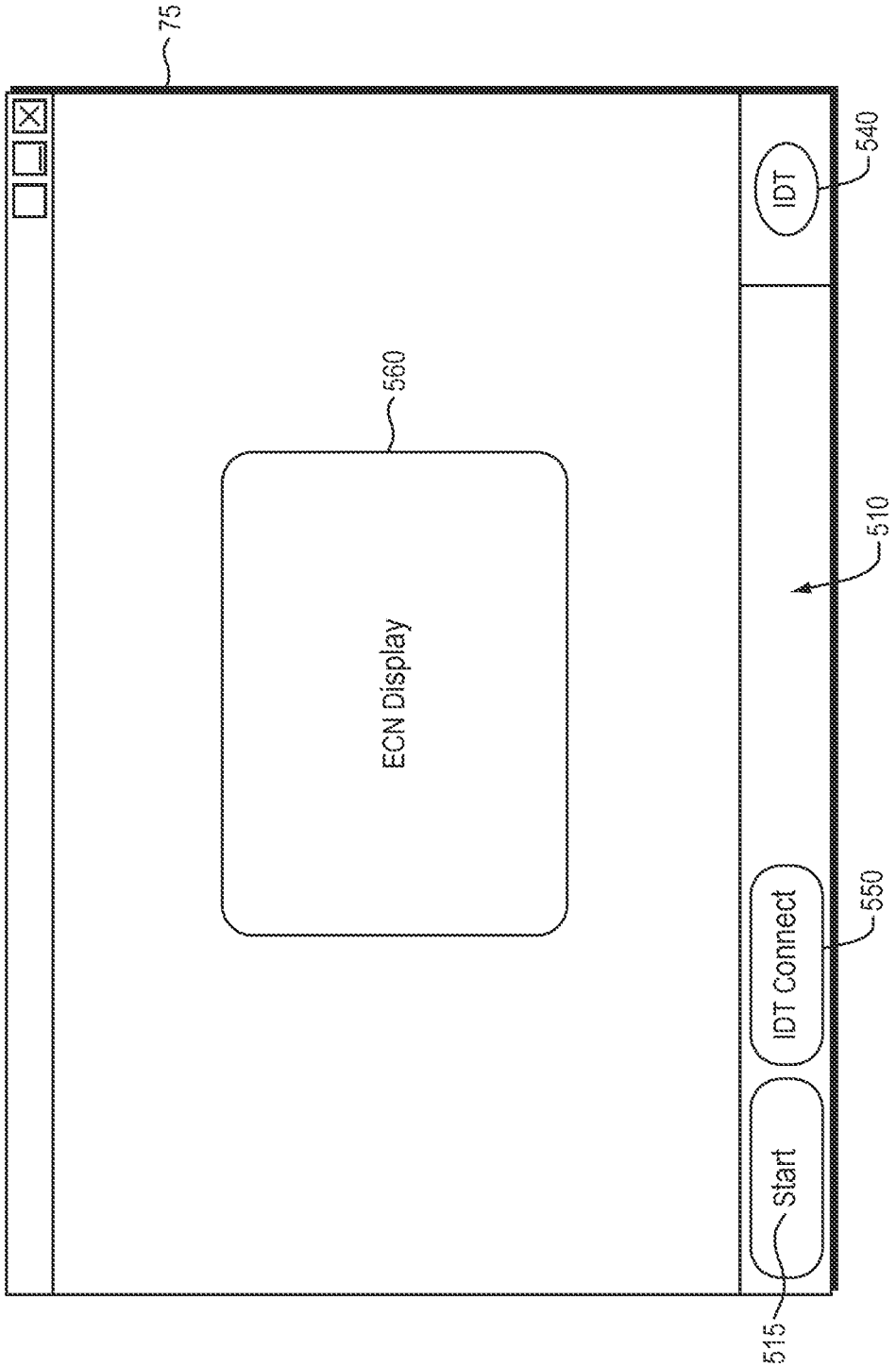


FIG. 12

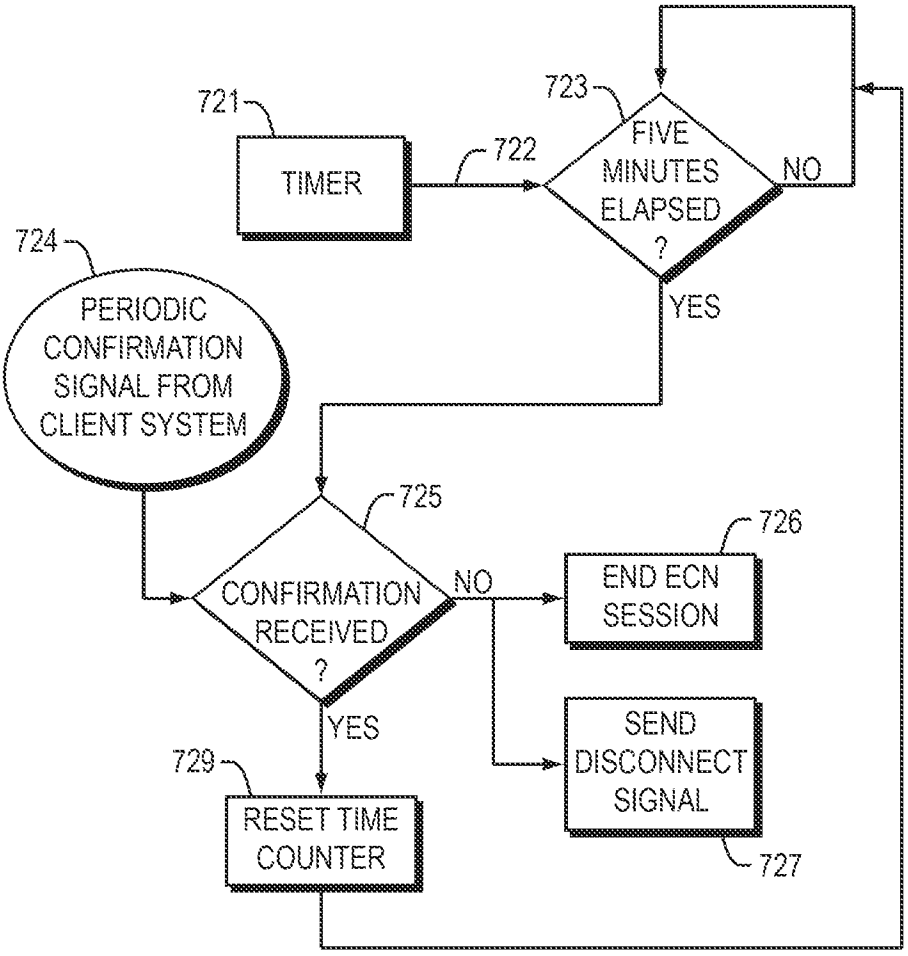
721
TIMER
722
723
FIVE MINUTES ELAPSED ?
NO
YES
724
PERIODIC CONFIRMATION SIGNAL FROM CLIENT SYSTEM
725
CONFIRMATION RECEIVED ?
NO
YES
726
END ECN SESSION
SEND DISCONNECT SIGNAL
727
729
RESET TIME COUNTER

FIG. 13

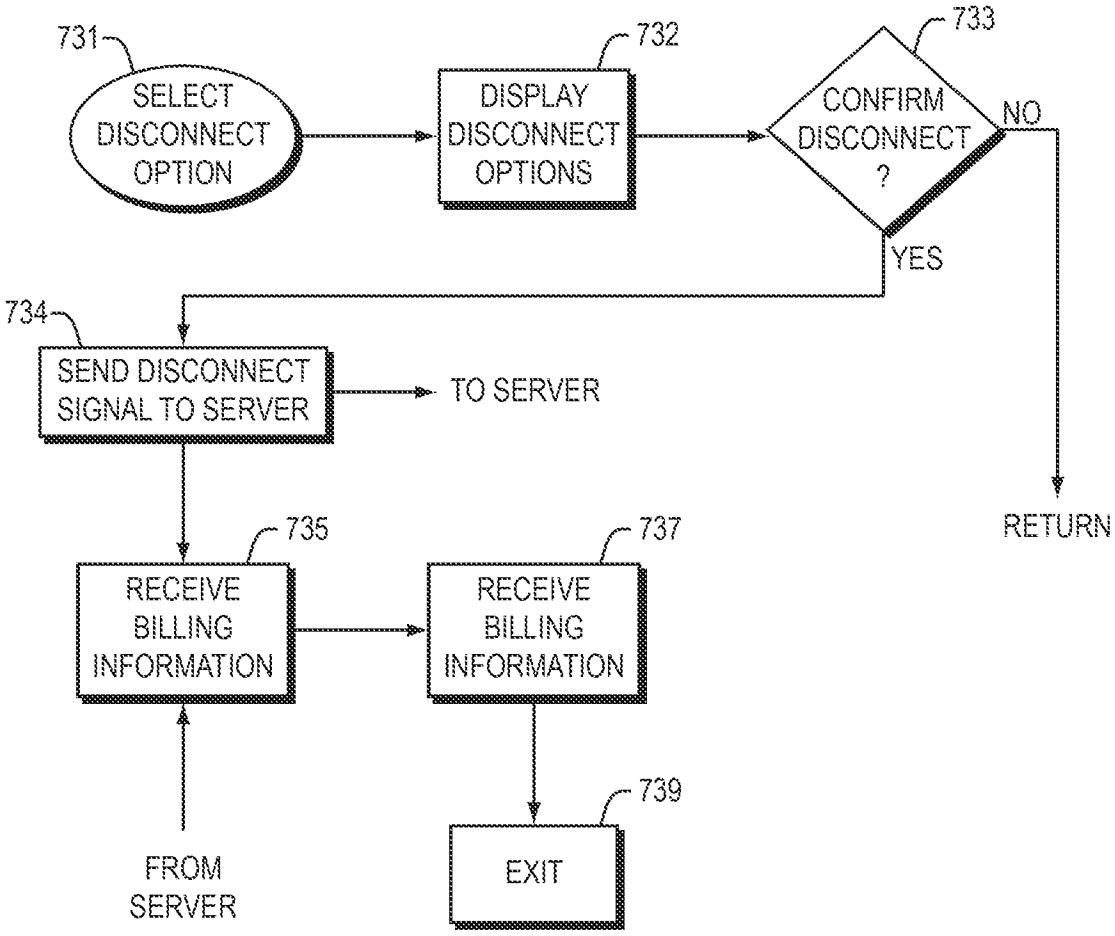
731
SELECT DISCONNECT OPTION
732
DISPLAY DISCONNECT OPTIONS
733
CONFIRM DISCONNECT ?
NO
YES
RETURN
734
SEND DISCONNECT SIGNAL TO SERVER
TO SERVER
735
RECEIVE BILLING INFORMATION
737
RECEIVE BILLING INFORMATION
739
EXIT
FROM SERVER

FIG. 14

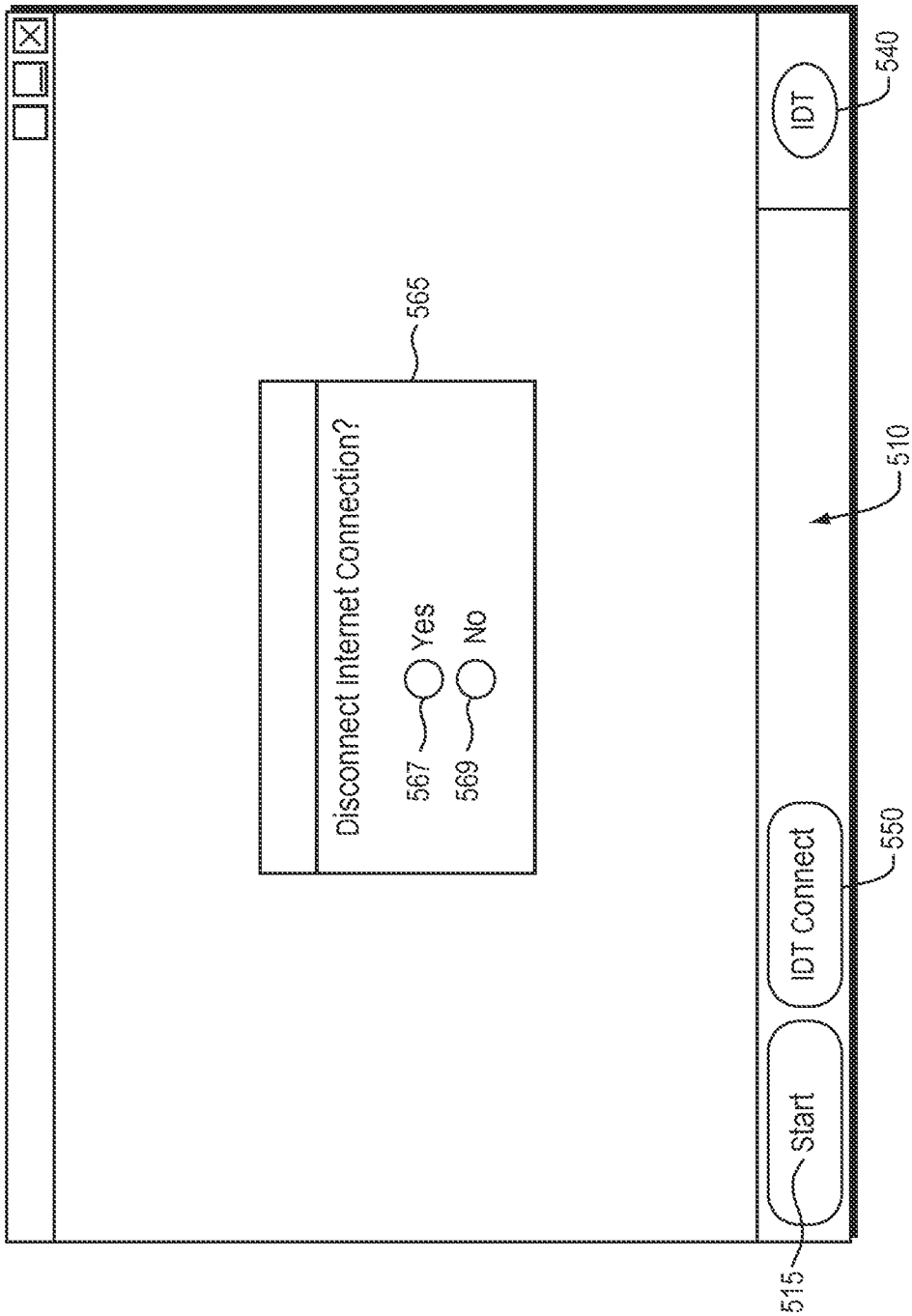
565
Disconnect Internet Connection?
Yes
No
567
569
510
IDT
540
IDT Connect
550
Start
515

FIG. 15

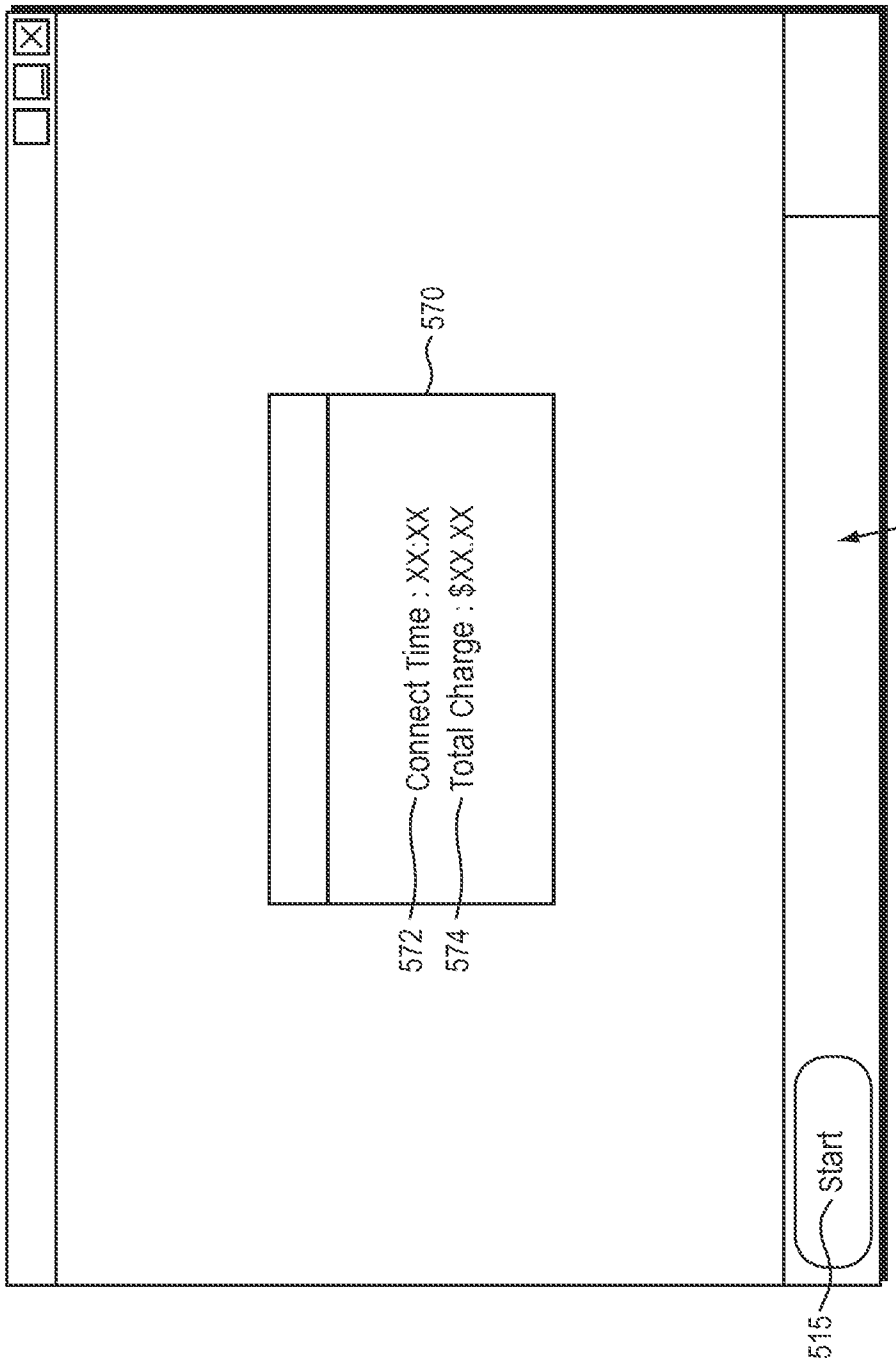
570
Connect Time : XX:XX
Total Charge : $XX.XX
572
574
510
Start
515

FIG. 16

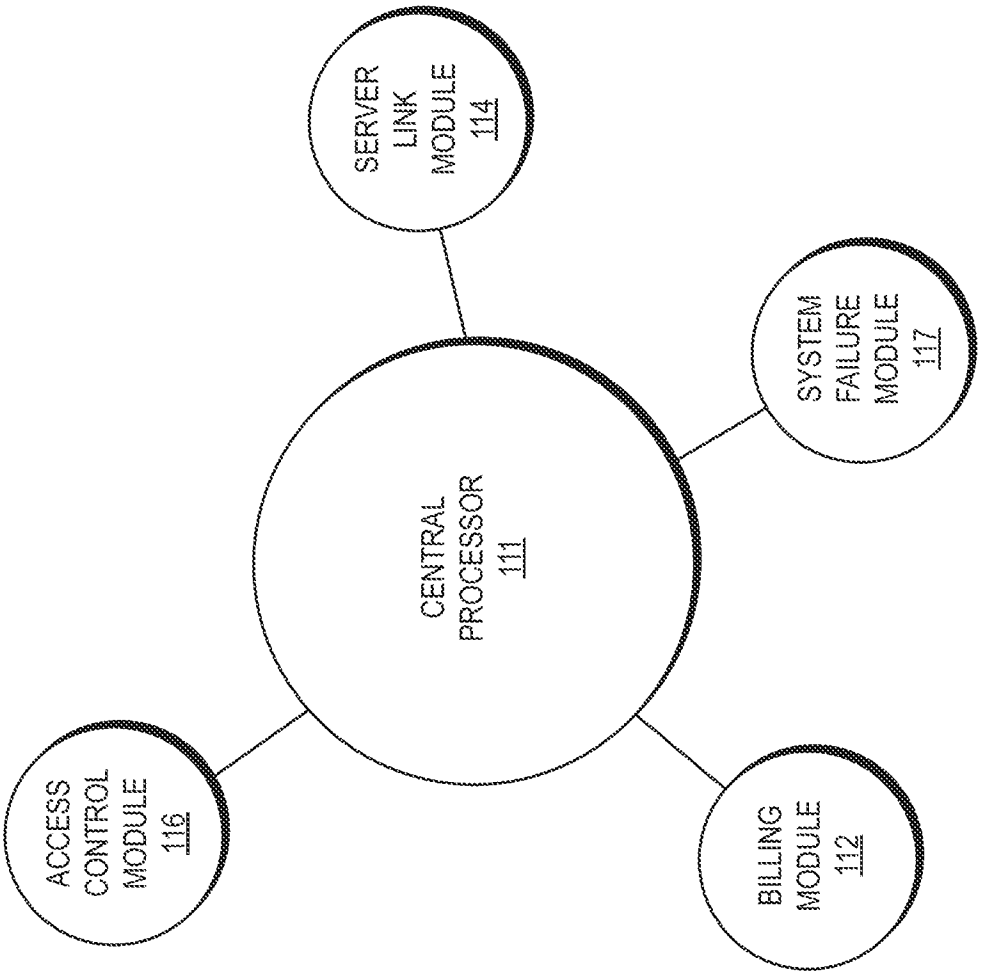
SERVER LINK MODULE 114
SYSTEM FAILURE MODULE 117
CENTRAL PROCESSOR 111
ACCESS CONTROL MODULE 116
BILLING MODULE 112

FIG. 17

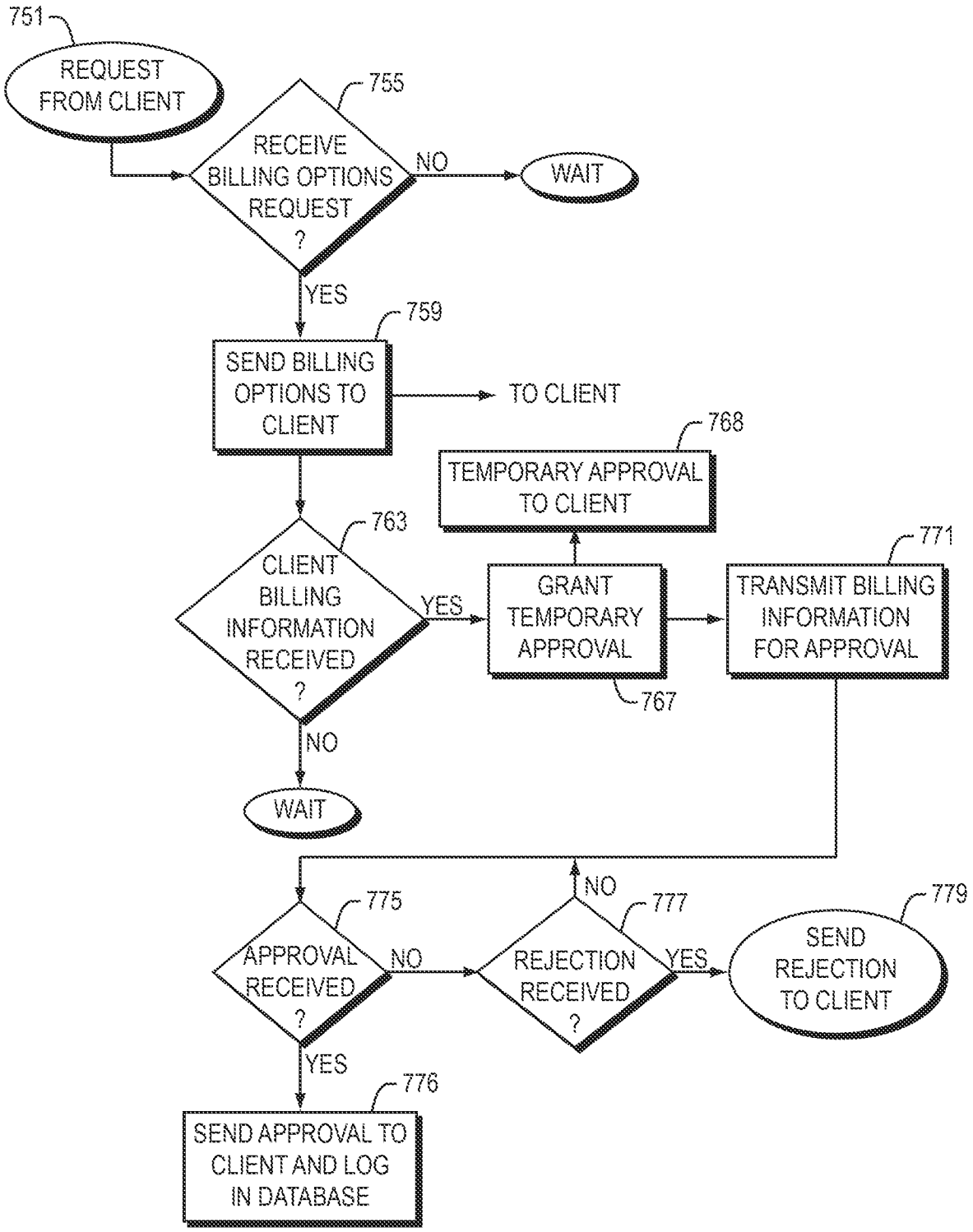
751
REQUEST FROM CLIENT
755
RECEIVE BILLING OPTIONS REQUEST ?
NO
WAIT
YES
759
SEND BILLING OPTIONS TO CLIENT
TO CLIENT
768
TEMPORARY APPROVAL TO CLIENT
763
CLIENT BILLING INFORMATION RECEIVED ?
YES
GRANT TEMPORARY APPROVAL
767
771
TRANSMIT BILLING INFORMATION FOR APPROVAL
NO
WAIT
NO
775
APPROVAL RECEIVED ?
NO
777
REJECTION RECEIVED ?
YES
779
SEND REJECTION TO CLIENT
YES
776
SEND APPROVAL TO CLIENT AND LOG IN DATABASE

FIG. 18

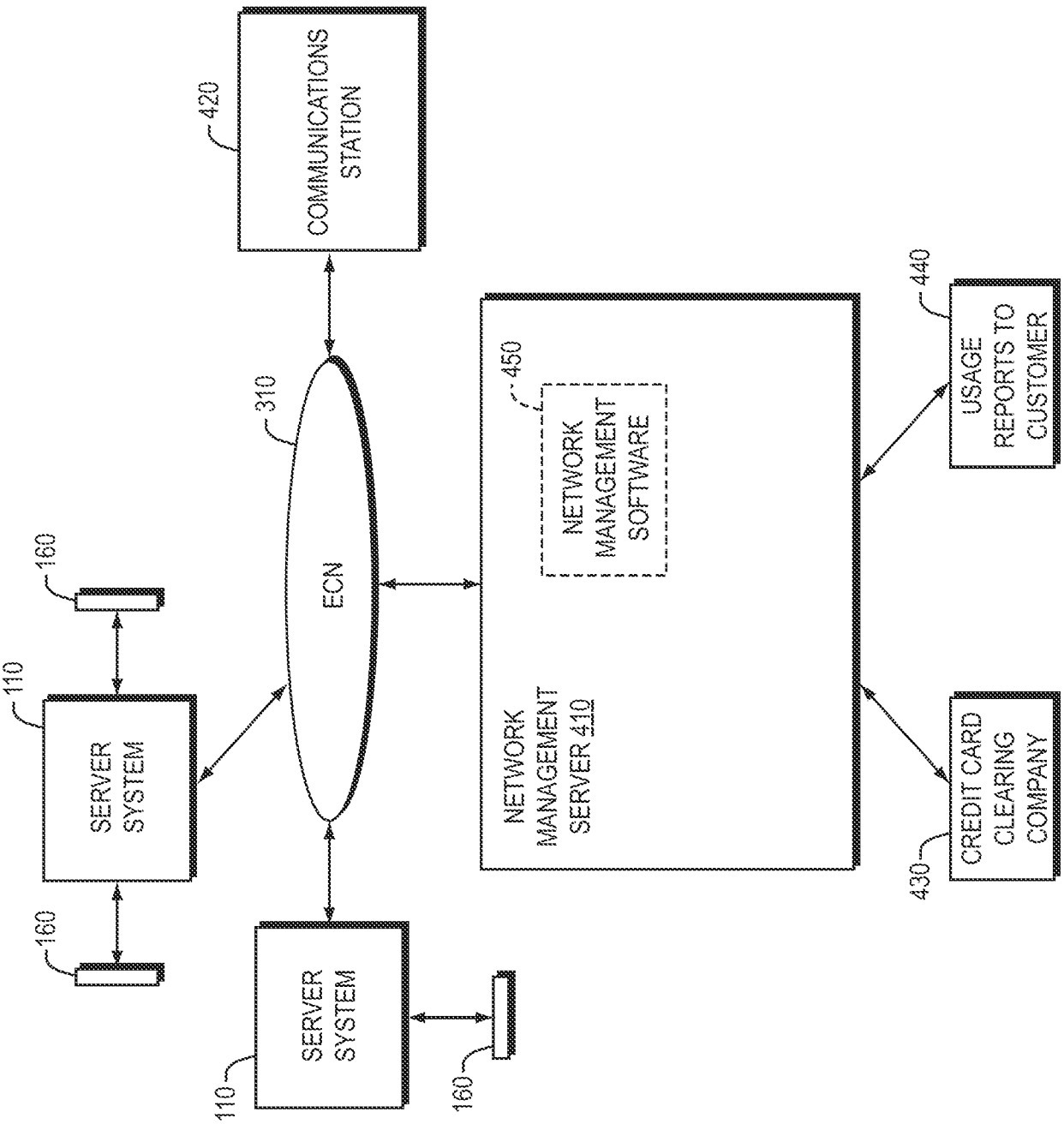
COMMUNICATIONS STATION
420
ECN
310
NETWORK MANAGEMENT SERVER 410
NETWORK MANAGEMENT SOFTWARE
450
USAGE REPORTS TO CUSTOMER
440
CREDIT CARD CLEARING COMPANY
430
SERVER SYSTEM
110
160
SERVER SYSTEM
110
160
160

FIG. 19

| PORT ID | ACCESS PORT 1 | ACCESS PORT 2 | ACCESS PORT N |
|---|---|---|---|
| CLIENT IP ADDRESS | XXX | YYY | NNN |
| CLIENT NETWORK CARD MAC ADDRESS | XXX | YYY | NNN |
| SERVER NETWORK CARD ID | XXX | YYY | NNN |
| USER NAME | XXX | YYY | NNN |
| CHARGE TYPE | XXX | YYY | NNN |
| CREDIT CARD NUMBER | XXX | YYY | NNN |
| CREDIT CARD HOLDER NAME | XXX | YYY | NNN |
| CREDIT CARD EXPIRATION | XXX | YYY | NNN |
| PORT STATE | XXX | YYY | NNN |
| ACCESS CARD NO. | XXX | YYY | NNN |
| ••• | ••• | ••• | ••• |

FIG. 20

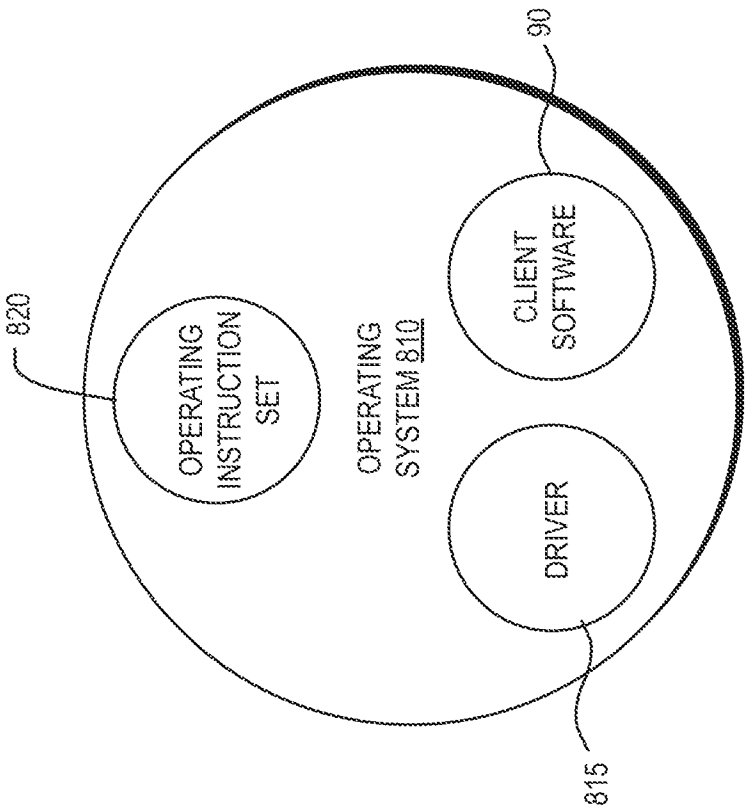
820
OPERATING INSTRUCTION SET
OPERATING SYSTEM 810
CLIENT SOFTWARE
90
DRIVER
815

FIG. 21